

Notice of Allowability	Application No.	Applicant(s)	
	10/826,471	HOSOYA ET AL.	
	Examiner	Art Unit	
	Niketa I. Patel	2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to response filed on 06/01/2006.
2. ☒ The allowed claim(s) is/are 1,2 and 8-21 (renumbered as 1-16).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 20060821.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>4/27/06, 9/26/05, 9/22/05, 7/27/05, 3/18/05,</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |
- 4/16/05,
11/05/04,
4/27/06.

EXAMINER'S AMENDMENT

Election/Restrictions

1. Applicant's election of Species I, associated with Fig. 1 (claims 1, 2 and 8-21) in the reply filed on 06/01/2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 3-7 and 22-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 6/1/2006.
3. A telephone call was made to the applicant's representative Shrinath Malur (Reg. No. 34,663) on 08/21/2006 to cancel the non-elected claims, in order to put the application in condition for allowance.

The application has been amended as follows:

Canceled: claims 3-7 and 22-24.

4. The following changes to the drawings have been approved by the examiner and agreed upon by applicant: Figures 16-20 must be designated by legend - -Prior Art- -. In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.
5. The following is an examiner's statement of reasons for allowance: the prior art of record taken alone and/or in combination with other does not teach and/or fairly suggest the limitation

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of a disk controller comprising: a channel adapter, a memory adapter, a processor adapter and a switch adapter each include a DMA controller for performing a communication protocol control of an inner network, in combination with other recited limitations.

Dennin et al. US 6,330,626 B1 (hereinafter '*Dennin*') teaches a disk controller comprising a channel adapter, a memory adapter, a processor adapter, a switch adapter as shown in figure 1, however, *Dennin* only teaches a centralized DMA controller (fig. 1, element 134.) *Dennin* does not each teach a channel adapter, a memory adapter, a processor adapter and a switch adapter each having a DMA controller.

Ganapathy et al. US 6,874,039 B2 (herein after '*Ganapathy*') teaches system with a distributed DMA where a processor adapter and a host adapter each has a DMA controller, however does not teach a switch adapter and a memory adapter with a DMA controller. Furthermore, the system of *Ganapathy* is not designed for disk controller environment.

Moriuchi US 5,586,127 (hereinafter '*Moriuchi*') teaches a disk controller with a buffer memory controller which, provides a DMA control of the transfers (fig. 1, element 20) however does not disclose a channel adapter, a memory adapter, a processor adapter, a switch adapter each include a DMA controller for performing a communication protocol control of an inner network.

Gunlock et al. US 6,952,734 B1 (hereinafter '*Gunlock*') teaches a packet with destination address, a source address and a sequence field with a task ID (col. 9, lines 56-67) however does not teach a channel adapter, a memory adapter, a processor adapter, a switch adapter each include a DMA controller for performing a communication protocol control of an inner network.

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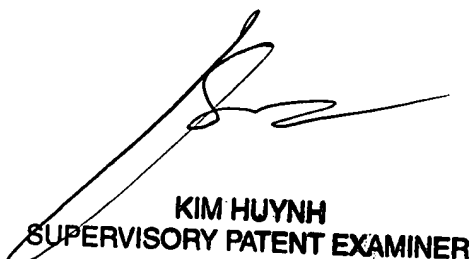
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Niketa I. Patel whose telephone number is (571) 272 4156. The examiner can normally be reached on M-F 8:00 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fritz Fleming can be reached on (571) 272 4145. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NP
08/21/2006


KIM HUYNH
SUPERVISORY PATENT EXAMINER
8/21/06